

THE CLAIMS

What is claimed is:

- 5 1. Primary composition comprising at least one
lipophilic bioactive compound and a whey protein
in an amount effective to increase the
bioavailability of the lipophilic bioactive
compound.
- 10 2. Primary composition according to Claim 1, wherein
the lipophilic bioactive compound is obtained,
extracted, enriched or purified from a plant,
microorganism, yeast or product of animal origin.
- 15 3. Primary composition according to Claim 2, wherein
the plant is tomatoes, soya, green tea, green
coffee beans, spices, grapes, cocoa, ginger or
cereals.
- 20 4. Primary composition according to Claim 2, wherein
the microorganism is any type of bacterium which
produces a lipophilic bioactive compound.
- 25 5. Primary composition according to Claim 2, wherein
the yeast is a yeast which produces a lipophilic
bioactive compound.
- 30 6. Primary composition according to Claim 2, wherein
the product of animal origin is chosen from the
group consisting of a liver extract and a milk
fraction.
- 35 7. Primary composition according to Claim 1, wherein
the lipophilic bioactive compound is a carotenoid,
polyphenol, lipophilic vitamin, flavonoid,

isoflavone, curcuminoid, ceramide,
proanthocyanidin, terpenoid, sterol, phytosterol,
sterol ester, tocotrienol, squalene, or retinoid,
alone or as a mixture.

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8. Primary composition according to Claim 1, wherein
the lipophilic bioactive compound is a tomato
extract, a soybean extract or a mixture thereof.

10 9. Primary composition according to Claim 1 in the
form of a powder, gel or liquid and which further
comprises at least one of vitamin C or tocopherol.

15 10. Primary composition according to Claim 1, which
further comprises at least one of an emulsifier, a
stabilizer or another additive.

20 11. Primary composition according to Claim 1, wherein
the lipophilic bioactive compound is present in an
amount of about 0.05 to 50% by weight of the
composition and the whey protein is present in an
amount of about 5 to 90% of the composition.

25 12. Primary composition according to Claim 11, wherein
the whey protein and lipophilic bioactive compound
are present in a weight ratio of about 1:1 to
500:1.

30 13. A primary composition comprising at least one
lipophilic bioactive compound of a tomato
oleoresin, a soybean extract, or a mixture
thereof, and a whey protein in an amount effective
to increase the bioavailability of the lipophilic
bioactive compound.

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14. Oral composition comprising the primary composition according to Claim 1 in a foodstuff, in a food supplement, in a cosmetic preparation or in a pharmaceutical preparation.
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15. Oral composition according to Claim 14, wherein the foodstuff is a yogurt, a liquid drink, a chocolate containing product, an ice cream, cereal, coffee or animal food.
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16. Oral composition according to Claim 14, wherein the food supplement further comprises at least one of a sweetener, a stabilizer, a flavoring and a colorant and is provided in the form of sugar-coated tablets, pills, gelatin capsules, a syrup, a gel or a cream.
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17. Oral composition according to Claim 14, wherein the cosmetic preparation additionally comprises a compound active with respect to the skin.
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18. Oral composition according to Claim 14, wherein the content of the primary composition is between about 0.001 and 100%.
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19. Oral composition according to Claim 18, wherein the content of the primary composition is between about 10 and 50%.
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20. Cosmetic composition comprising the primary composition according to Claim 1.
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21. Cosmetic composition according to Claim 20, wherein the content of primary composition is between about $10^{-10}\%$ and 10%.

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22. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the primary composition of Claim 1.
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23. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the oral composition of Claim 14.
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24. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the cosmetic composition according to Claim 20.
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- 25*
23. A process for the preparation of a primary composition according to Claim 1, which comprises associating the whey protein with the lipophilic bioactive compound under conditions sufficient to form the composition a mixture.
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- 24*
24. The process according to Claim 23, wherein the composition is formed by dissolving the whey protein in water to form a first solution,
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- dissolving the lipophilic bioactive compound in a solvent to form a second solution, combining the two solutions, and evaporating the solvent to form the composition as a dispersion.
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- 27*
25. The process according to Claim 23, wherein the composition is formed by mixing the lipophilic bioactive compound with a solvent to form a first mixture, mixing the first mixture with the whey protein in the form of a powder to form a second mixture and evaporating the solvent from the
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second mixture to produce the composition as a dry powder.

pull 26 5 ²⁸ 26. The process according to Claim 24, wherein the solvent is acetone, ethanol, isopropanol or mixtures thereof.

²⁹ 27. The process according to Claim 25, wherein the solvent is acetone, ethanol, isopropanol or mixtures thereof.
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